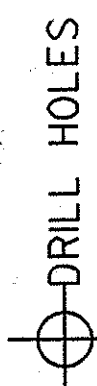
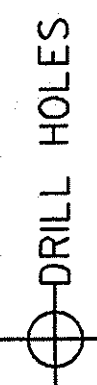
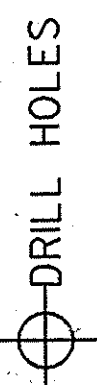


BORDER REV. DATE: JUN 1, 2004



PROJECT DESCRIPTION
GENERAL
THIS PROJECT INVOLVES THE RECONSTRUCTION OF A TRAFFIC SIGNAL AT THE INTERSECTION OF MD 404 (SHORE HIGHWAY) AND MD 16 (HARMONY ROAD)/DOUBLE HILLS ROAD IN CAROLINE COUNTY.
INTERSECTION OPERATION
A CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 6 NEMA PHASES. EXCLUSIVE/PERMISSIVE LEFT TURN PHASES SHALL BE PROVIDED FOR THE EAST & WEST APPROACHES OF MD 404.

SPECIAL NOTES
1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:
MR. ROBERT L. KIEL, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 810-3240
MR. JEFF AMORIELLO, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 810-3270
MR. TERRY O. WRIGHT, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 810-3250
MR. BARRY CLOTHIER, UTILITY ENGINEER
PHONE: (410) 810-3275
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

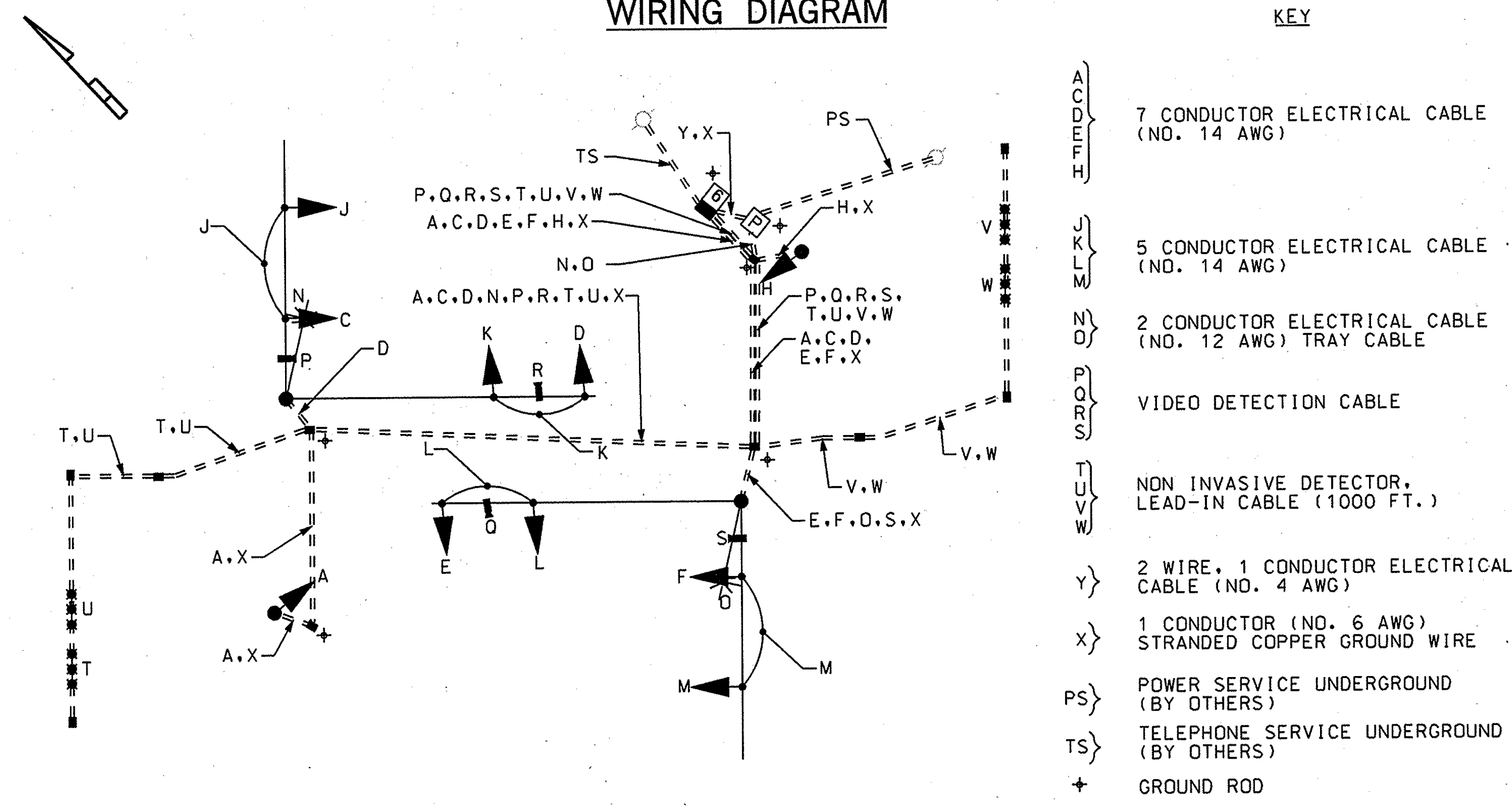
EQUIPMENT LIST			
A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.			
CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	BASE MOUNTED CONTROLLER AND CABINET SIZE 6 W/ VIDEO DETECTION INTERFACE EQUIP.	EA	1
973023	FLAT SHEET ALUMINUM SIGNS CONSISTING OF: R10-12 (30"x36") MAST ARM MOUNT D-3(2) (16" X VAR.) MAST ARM MOUNT GUIDE SHIELD ASSEMBLY (48"x75")	SF EA EA EA	94 2 2 2

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.			
CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	4
585624	24 INCH HEAT APPLIED WHITE PERM. PREFORMED THERMO. PAVEMENT MARKINGS	LF	170
800000	REMOVE AND RELOCATE EXISTING VIDEO DETECTION CAMERA	EA	4
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	12
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	350
805115	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED	LF	150
805118	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED	LF	350
805125	2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	60
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	840
805140	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	20
807202	METERED SERVICE PEDESTAL	EA	1
810605	NON INVASIVE DETECTOR, 1000 FOOT, LEAD IN CABLE	EA	4
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	10
813015	INSTALL OVERHEAD SIGN	SF	94
816001	VIDEO DETECTION CAMERA	EA	4
816005	CONTROL CABLE, 250 FOOT VIDEO DETECTION CAMERA TO CONTROLLER	EA	2
816010	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER	EA	2
818004	10 FOOT BREAKAWAY PEDESTAL POLE	EA	2
818050	STEEL POLE WITH TWIN 50 FOOT AND 60 FOOT MAST ARMS	EA	2
831010	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EA	2
832017	CABLE 1-CONDUCTOR, NO. 4 AWG, TYPE USE, 600V	LF	20
837001	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH	EA	6
860272	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	38
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	90
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	1000
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	LF	400
866104	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	2
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1

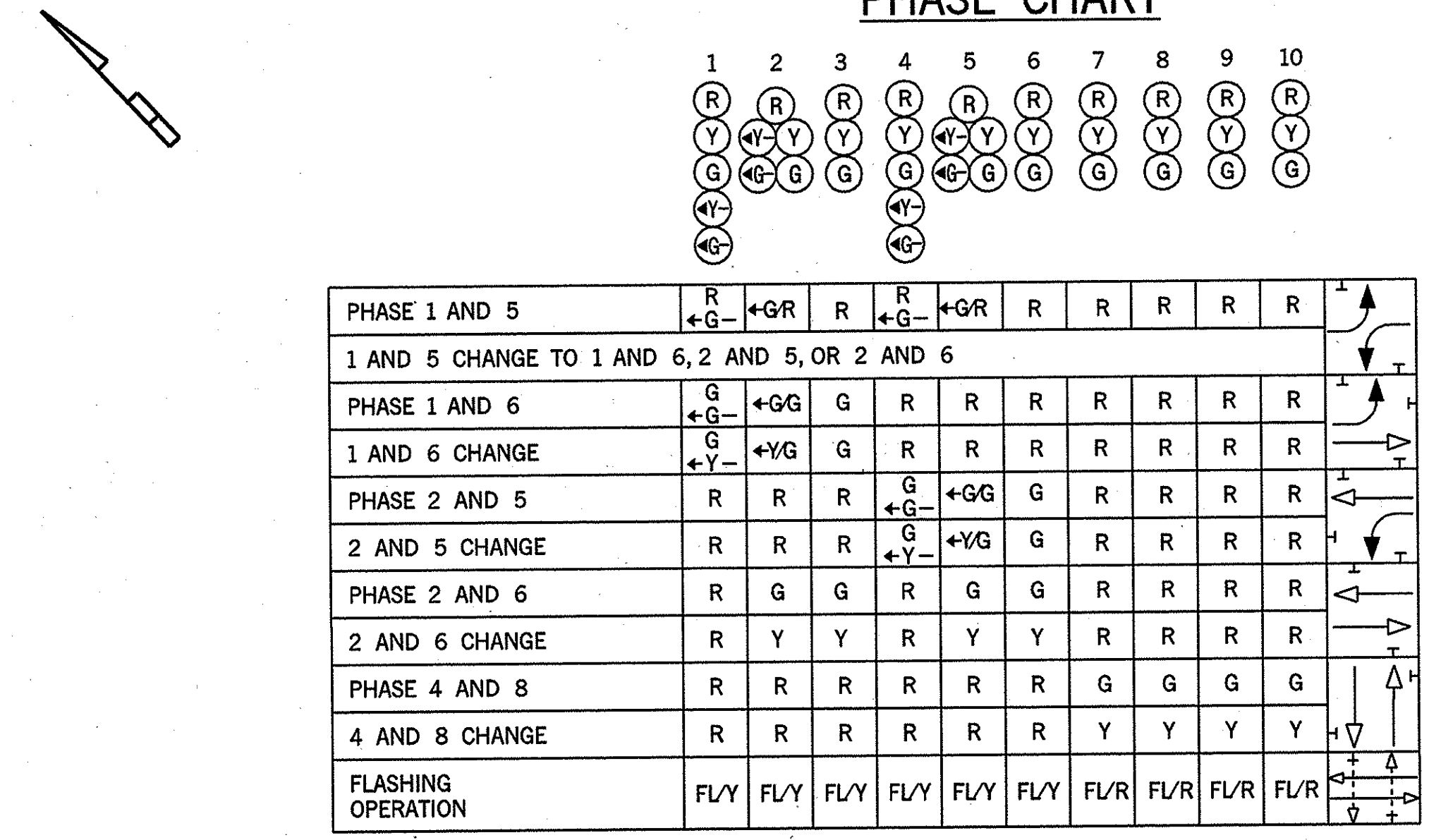
C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILLIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
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WIRING DIAGRAM



PHASE CHART



ULTIMATE

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
**MD 404 @ MD 16/
DOUBLE HILLS ROAD**

GREENLINE **GREENLINE REVISION I**
SABRA, WANG & ASSOCIATES, INC.
1504 JOH AVENUE
SUITE 100
BALTIMORE, MD 21227
(410) 737-8584
WWW.SABRA-WANG.COM

REVISIONS		GENERAL INFORMATION PLAN	
SCALE <u>N.T.S.</u> DATE _____ CONTRACT NO. <u>C03215270</u>		DESIGNED BY <u>C. FLEMING</u> COUNTY <u>CAROLINE</u>	
DRAWN BY <u>C. FLEMING</u> LOGMILE <u>05001612.76</u>		CHECKED BY <u>S. RENZI</u> T.I.M.S. NO. _____	
F.A.P. NO. _____ TOD NO. _____		DRAWING NO. <u>TS-1378C</u> SHEET NO. <u>OF</u>	

FILE: R:\2001\61HWYDES\WRA\TASK 15 MD 404\DWG\SIGNAL\GD03M404.DGN
DATE: 12-JULY-05 1:45